

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matters of)	
)	
IP Enabled Services)	WC Docket 04-36
)	
E911 Requirements for IP-Enabled)	WC Docket 05-196
Service Providers)	

INITIAL COMMENTS OF INTRADO INC.

Intrado Inc. (Intrado)¹ hereby submits these initial comments in response to the Federal Communications Commission's (Commission) Notice of Proposed Rulemaking (NPRM) seeking comment on what additional steps the Commission should take to ensure that interconnected VoIP Service Providers (VSP) provide ubiquitous and reliable E911 service.²

Intrado supports the Commission's efforts to ensure that public safety is protected and is committed to working with the necessary parties to make this a reality not only for VoIP service customers, but also for users of other communications technologies that reasonably expect emergency calling capabilities. Moreover, interconnected VoIP service customers should have access to E911 service equivalent to that currently available to existing wireline end users, and the Commission's rules should promote parity with wireline E911 service whenever possible.

DISCUSSION

I. The Commission Should Clarify That MSAG-Validated Addresses Should Be Provided to PSAPs.

The Commission was correct to require that the call back number and location information of the interconnected VoIP caller be delivered to PSAPs. Providing the Registered Location, however, is less desirable than providing a master street address guide (MSAG)-validated address. Delivering the Registered Location may result in the display of an improper set of emergency response agencies at the PSAP and may render Computer Aided Dispatch (CAD), Geographic Information System (GIS)/Mapping, and other MSAG address-sourced public safety systems

¹ Founded in 1979, Intrado (NasdaqNM: TRDO) is the nation's leading provider of sophisticated solutions that identify, manage and deliver mission critical information for telecommunications providers and public safety organizations.

² *IP-Enabled Services, E911 Requirements for IP-Enabled Service Providers*, First Report and Order and Notice of Proposed Rulemaking, WC Docket Nos. 04-35 & 05-196, FCC 05-116 (rel. June 3, 2005).

ineffective.³ As a result, the public safety community may be required to consume already limited administrative and economic resources to modify existing CAD/GIS systems to support non-MSAG validated address data. Further, requiring that an MSAG-validated address be provided to the PSAP, rather than the Registered Location, will promote parity between wireline and VoIP E911 services.

By way of explanation, Intrado currently performs the following MSAG validation process for its VSP customers:

1. receives the “Registered Location” of the VoIP service customer;
2. geocodes the Registered Location to determine x,y coordinates of VoIP service customer’s location and the appropriate wireline PSAP;
3. performs MSAG validation using the Registered Location;
4. converts the Registered Location address to an MSAG-validated address; and
5. stores the MSAG-validated address and MSAG emergency services number (ESN) for future call routing and retrieval determinations.

When an automatic location information (ALI) query is received, Intrado provides an MSAG-validated address for the VoIP service customer, as well as an MSAG ESN that will propagate an ALI record for the PSAP display that identifies the proper set of emergency response agencies (i.e. fire, police, medical). Thus, Intrado provides an address containing properly formatted information compatible with the PSAP’s MSAG address-sourced systems and applications. This process promotes higher data quality which, in turn, helps to improve emergency response times.

The National Emergency Number Association (NENA), the Voice On The Net (VON) Coalition, and the Texas Commission on State Emergency Communications (CSEC) all agree that delivery of an MSAG-validated address instead of the Registered Location is preferable.^{4, 5} Delivery of the MSAG-validated address will ensure that the address information displayed at the PSAP will be consistent with the information displayed for neighboring wireline users, and that the proper English language translations (ELTs) for the emergency response agencies are displayed.

Some 911 entities advocate use of the Registered Location until an MSAG-validated address is available. This approach, however, has limitations. First, doing so will require costly modifications to existing VoIP E911 provisioning software. Second, such an approach will create disparity between E911 service in the VoIP and wireline environments. Wireline providers are not required to provide location information to the PSAP if an MSAG-validated address is unavailable during E911 provisioning. Instead, such wireline calls generate “No Record Found” conditions. This process is designed to ensure the integrity of the 911 data, and the same process should apply to VoIP E911 calls.⁶

³ Most CAD/GIS systems will not be able to use the registered location information (in a civil or United States Postal Service format) because their geo-files are based on and synchronized with the MSAG.

⁴ *JOINT PETITION FOR CLARIFICATION OF THE NATIONAL EMERGENCY NUMBER ASSOCIATION AND THE VOICE ON THE NET (VON) COALITION*, WC Docket No. 04-36; WC Docket No. 05-196, July 29, 2005.

⁵ CSEC has made this assertion in several public forums.

⁶ In most E911 systems in the United States, the calling subscriber’s name is included in the ALI information provided to the PSAP. In many public safety situations, having the subscriber name is

II. The Commission Should Prescribe Requirements For PSAPs That Are Not Connected To A Selective Router.

Intrado shares the Commission's view that the current use of 10-digit, 24x7 emergency numbers at the Public Safety Answering Point should not be the primary solution for VoIP/E911. However, even with the schedule the Commission has put forth, large parts of the country will continue to be dependent on this solution until native delivery of E911 calling can be implemented, including those areas served by PSAPs not connected to a selective router. It is critical, therefore, that the Commission permits use of a 10-digit solution in the interim and articulate reasonable expectations for migrating from the interim solution to a native one. With a commitment from the VSP to move to native delivery of E911 calls, PSAPs should be encouraged to take calls on 10-digit emergency lines until a native solution is deployed.

Intrado also urges the Commission to extend the rules pertaining to the provision of call back and location information to include all PSAPs that are capable of displaying the caller's location and call back number, regardless of whether they are connected to a selective router.

In addition, the rules for interconnected VoIP E911 should only apply where PSAPs already possess the ALI infrastructure to enable wireless E911 service. Where such infrastructure does not exist, implementing a native VoIP E911 solution is very costly. The high implementation costs associated with a relatively small volume of nomadic/mobile interconnected VoIP service customers may cause VSPs to restrict their offerings only to those locations served by a selective router; thereby making interconnected VoIP service unavailable to broadband users in lightly populated areas.⁷

III. All Providers Of VoIP Services Providing PSTN Access Should Be Subject To 911 Obligations.

Emergency communications services should be available to all callers with access to the PSTN. The Commission should employ this guiding principle when determining the applicability of E911 obligations for any, and all, types of technology. Thus, the current rules should be clarified to include all VoIP providers, including PC-to-phone services and IP PBX services. The technical ability of the PSAP should be the only variable; thus, a VSP or IP PBX service provider should deliver a 911 call either to the native E911 network or to a 10-digit emergency line.

invaluable to responding to emergency situations. The Commission should promulgate appropriate rules to ensure that VSPs deliver subscriber name information to PSAPs where such information is provided for wireline 911 calls.

⁷ Intrado agrees with T-Mobile's assertion that "[f]or mobile or nomadic VoIP applications, the PSAP will not be considered capable of 'receiving and utilizing' E911 data until the PSAP can use non-call associated signaling, retrieve location from real-time databases and the implementation period in 47 C.F.R 20.18 has elapsed with respect to a request associated with signaling and databases." See *Petition of T-Mobile USA, INC. For Clarification*, FCC Docket 04-36 & 05-196, July 29, 2005.

Intrado encourages the Commission to enforce E911 regulations across all providers of VoIP services providing PSTN access, regardless of the means of physical transport. VoIP has continued to blur the boundaries between the application and transport, creating new services that work across a variety of transport methods. Future VoIP access devices will connect over a wide variety of internet access technologies providing enhanced mobility that is indifferent to transport. Such advancements should not come at the expense of emergency communications services. The transport used to access the service, whether it is DSL, cable, fiber, or wireless technology, should have no impact on the requirement for E911 services, and the Commission should make those requirements applicable to all VoIP services providing PSTN access.

IV. State And Local Governments Should Not Play A Role Similar To The Roles They Play In Implementing The Commission's Wireless 911/E911 Rules.

Although state and local governments play a role in determining fees and possible cost recovery processes within their respective areas of authority, it is critical that state and local governments refrain from imposing additional implementation rules and regulations that are not in the interest of VoIP service customers simply because "they have always done it that way" for wireless 911/E911. For example, even though ALI retrieval processes utilize and display dynamic call information in a manner consistent with wireless E911, the voice network infrastructure deployed for VoIP, as well as VoIP calling patterns and call processing mechanics, more closely parallel the wireline environment. Thus, networks should be designed and trunking configurations should more closely resemble that of a wireline end office.⁸

In addition, wireless service providers are required to establish dedicated trunking to the selective routers for every PSAP served by that router. For wireline end office terminations, only one dedicated trunk group (with a minimum of two trunks) is required to the selective router, regardless of how many PSAPs might receive traffic from that end office. Given the operational nature of VoIP E911 call processing fabric, it would be inappropriate to impose wireless E911 per-PSAP trunk configuration rules on a VSP.

Further, it would be inappropriate for any one community to hold VSPs to a higher standard than other communities across the country. Traffic capacity and network design and configuration requirements should be left to standards development organizations having expertise in the efficient and effective design of networks. Such an approach will promote the availability of high quality, reliable access to emergency services with universal network parity across the nation.

Thus, Intrado encourages the Commission to monitor and discourage any network connection requirements/rules imposed by state and local governments on VoIP network design and configuration criteria. It is critical that local rules bring value to the VoIP service customer

⁸ The advent of wireless 911 introduced significant duplication of 911 calls for events that are visible to the wireless equipped public at the scene. One incident often results in tens or hundreds of wireless 911 calls reporting the same event (e.g. a traffic accident on an interstate highway). Consequently, E911 systems have been specifically configured in many areas of the country to minimize the effects of such incident driven calling. Current calling statistics indicate that incident driven 911 calling is not experienced in the interconnected IP environment. Thus, it appears that the overall guiding principle for connected IP traffic management and trunking should more appropriately be patterned similar to wireline versus wireless.

and/or emergency response agencies, without generating unwarranted costs or creating deployment delays.

CONCLUSION

Intrado supports the Commission's leadership in moving the nation's 911 system forward. Intrado encourages that the Commission's consideration of additional 911/E911 rules be based upon the guiding principle that E911 should be available for any device that has access to the PSTN, regardless of the technology used. This will ensure that our nation will have truly ubiquitous and reliable emergency services. To that end, the Commission should ensure that state and local governments do not establish onerous and inappropriate rules in place that not only delay the deployment of E911, but also place undue financial burdens on those entities involved with enhancing the nation's 911 system. In addition, the Commission should acknowledge that native VoIP E911 services will not be in place within 120 days in several areas of the country due to a variety of reasons. Therefore, the Commission should permit delivery of VoIP E911 calls to 24x7 emergency lines as an interim solution until native VoIP E911 is implemented. The interim solution will allow citizens to reach the local PSAP, which far outweighs the prospect of being denied access to emergency services.

Respectfully Submitted,

/s/ _____
Mary A. Boyd
Vice President Government and
External Affairs
Intrado Inc.
1601 Dry Creek Drive
Longmont, Colorado 80503
Telephone: (720) 494-5800
Facsimile: (720) 494-6600

Dated: August 15, 2005